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WC1N 1AX (GB). TEESDALE-SPITTLE, Paul, Henry [GB/NZ]; School of Biological Sciences, Te Kura Matauranga Koiora, Victoria University of Wellington, P.O.Box 600, Wellington (NZ).

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(74) Agent: GILL JENNINGS & EVERY; Broadgate House, 7 Eldon Street, London EC2M 7LH (GB).

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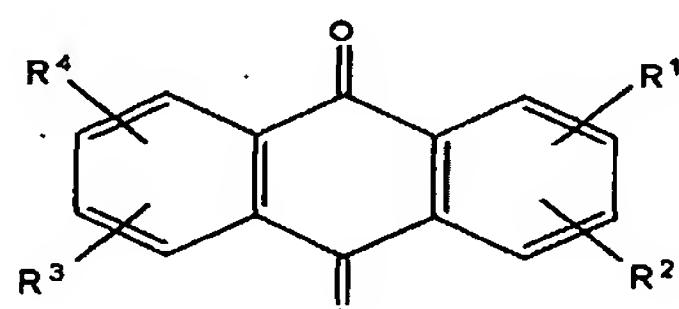
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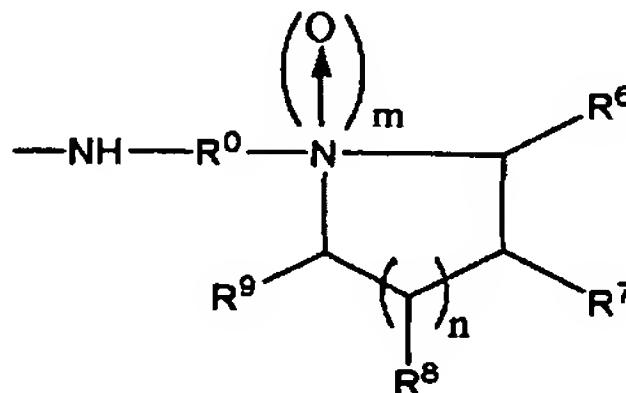
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(54) Title: ANTHARQUINONE COMPOUNDS AS ANTI CANCER COMPOUNDS



(I)



(II)

(57) Abstract: Anthraquinone compounds of the general formula (I) or a salt thereof (Formula I) in which R¹ to R⁴ are each selected from the group consisting of H, C₁₋₄ alkyl, X¹, -NHR⁰N (R⁵)₂ in which R⁰ is a C₁₋₁₂ alkanediyl and each R⁵ is H or optionally substituted C₁₋₄ alkyl, and a group of formula (II) in which at least one of R⁶, R⁷ and R⁸ is selected from X², and X² substituted C₁₋₄ alkyl and any others are H or C₁₋₄ alkyl; R⁹ is selected from H, C₁₋₄ alkyl, X² and X² substituted C₁₋₄ alkyl; m is 0 or 1; n is 1 or 2; X¹ is a halogen atom, a hydroxyl group, a C₁₋₆ alkoxy group, an aryloxy group or an acyloxy group; and X² is a halogen atom, a hydroxyl group, a C₁₋₆ alkoxy group, an aryloxy group or an acyloxy group; provided that at least one of R¹ to R⁴ is a group of formula (II). The N-oxides are useful prodrugs which are selectively bioreduced in hypoxic tumours to the corresponding cyclic amine derivatives. The amine compounds are cytotoxic and may be used as alkylating agents having topoisomerase II inhibiting activities in cancer therapy.

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